

CEN Reference: BT N 11670

Draft BT C129/2019

CENELEC Reference: BT164/DG11378/DV

Simultaneous circulation to CEN and CENELEC TECHNICAL BOARDS

BT by correspondence	CENELEC Agenda item:	5.1.1
For vote	Issue date:	2019-07-10
In accordance with IR2, 6.1.4 (CEN)	Deadline	2019-10-01

SUBJECT

Creation of a new CEN-CLC/JTC ‘Blockchain and Distributed Ledger Technologies’

BACKGROUND

On 2019-07-04, CCMC received a proposal from UNI for the creation of a joint CEN-CENELEC Technical Committee in the area of Blockchain and Distributed Ledger Technologies (DLT), for which details are provided in Annex.

This proposal follows the report to BTs (BT N 11601, BT163/DG11327/REP) of the CEN-CENELEC Focus Group on Blockchain and DLT, where the BTs noted the proposal for the creation of a CEN-CLC/JTC as put forward by the Focus Group, and the fact that UNI, holding the secretariat of the Focus Group, will submit the proposal to the BTs.

The proposed Technical Committee will be responsible for the development and adoption of standards for Blockchain and Distributed Ledger Technologies, covering the following aspects: organizational frameworks and methodologies, processes and products evaluation schemes, Blockchain and distributed ledger guidelines, smart technologies, objects, distributed computing devices and data services.

The use of Blockchain and Distributed Ledger technologies continues to grow rapidly, with many applications and systems being developed, notably in the context of Industry 4.0, with applications in the energy, health, manufacturing, finance, insurance, sectors, etc. Therefore, it is proposed to create a joint Technical Committee between CEN and CENELEC, to involve both communities to support the uptake of this crosscutting technology in Europe (which need has also been expressed in the CEN-CLC White Paper on Blockchain and Distributed Ledger Technologies – and approved by CEN and CENELEC BTs through BT 040/2018 and D160/011 respectively).

The proposed joint Technical Committee will focus on specific European requirements, especially in the legislative and policy context, and will proceed with the identification and possible adoption of standards already available or under development at

international level (especially ISO/TC 307). If required, these standards will be 'augmented' by TSs or TRs, to address the specific European context.

The proposed joint Technical Committee will notably suggest the establishment of two specific Working Groups on eIDAS and GDPR, which will require strong collaboration with CEN/TC 224 'Personal identification and related personal devices with secure element, systems, operations and privacy in a multi sectorial environment' and CEN-CLC/JTC 13 'Cybersecurity and Data protection'.

By BT 49/2017 and D157/041, CEN and CENELEC BTs respectively, decided that the following criteria are to be met for creating CEN-CLC/JTC:

- 12 weeks consultation by correspondence
- vote according to IR2 clause 6.1.4 in CEN and a synchronized 12-week BT consultation in CENELEC,
- at least 5 countries committed to participate.

As a consequence, members are requested to state explicitly whether or not they are committed to participate in the work.

PROPOSAL(S)

BT,

- having considered the proposal for a new field of technical activity submitted by UNI to CCMC on 2019-07-04, as included in Annex to BT N 11670 and BT164/DG11378/DV;
- having considered that the following members have expressed commitment to participate
 - o <members>
- decided to create a new CEN-CLC/JTC XXX 'Blockchain and Distributed Ledger Technologies' with the following preliminary scope:

Scope:

To prepare, develop and/or adopt standards for Blockchain and Distributed Ledger technologies covering the following aspects:

- Organizational frameworks and methodologies, including IT management systems
- Processes and products evaluation schemes
- Blockchain and distributed ledger guidelines
- Smart technology, objects, distributed computing devices, data services

The JTC will focus on European requirements, especially in the legislative and policy context, and will proceed with the identification and possible adoption of standards already available or under development in other SDOs, which could support the EU Digital Single Market and/or EC Directives/Regulations. Special attention will be paid to ISO/TC 307 standards. If required these standards will be augmented by TRs and TSs.

- allocated the secretariat of CEN-CLC/JTC XXX to UNI;
- asked the new CEN-CLC/JTC XXX to submit its final title and scope for BT approval after its first meeting.

2019-07-04 – CK



PROPOSAL for a NEW FIELD OF TECHNICAL ACTIVITY	
Date of circulation	CEN/TC / SC N (where appropriate)
Secretariat	CENELEC/TC / SC (Sec) (where appropriate)
Type of technical body proposed (TC / SC / BTTF)

IMPORTANT NOTE: Incomplete proposals risk rejection or referral to originator.

The proposer has considered the guidance given in Annexes 1 and 2 during the preparation

Proposal (to be completed by the proposer)

<p>Title of the proposed new subject (The title shall indicate clearly and unambiguously, yet concisely, the new field of technical activity which the proposal is intended to cover.)</p> <p>Technical Committee on Blockchain and Distributed Ledger Technologies</p>
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Scope statement of the proposed new subject

(The scope shall precisely define the limits of the new field of technical activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)

The TC activities are bound to development and adoption of standards for Blockchain and Distributed Ledger technologies covering the following aspects:

- Organizational frameworks and methodologies, including IT management systems
- Processes and products evaluation schemes
- Blockchain and distributed ledger guidelines
- Smart technology, objects, distributed computing devices, data services

The TC will focus on European requirements, especially in the legislative and policy context, and will proceed with identification and possible adoption of standards already available or under development in other SDOs and international bodies, such as ISO, IEC, ITU-T, IEEE, NIST or industrial fora which could support the EU Digital Single Market (DSM) and different standardization requests and/or EC Directives/Regulations. Special attention will be paid to ISO/TC 307 standards. If required these standards will be augmented by TRs and TSs.

For the relevant standards different options will be considered:

- Identical adoption as EN using for example Vienna/Frankfurt agreements.
- Adoption as EN with additional/complementary requirements, for example in order to fulfil European legal requirements.

The Technical Committee on Blockchain and Distributed Ledger Technologies will take over the activities of the CEN/CENELEC FG and continue to carry on its activities:

- Identify specific European standardization needs with a special attention on interoperability and regulatory issues: compliance of blockchain implementations with EU legislations (such as GDPR, eIDAS, NIS...) will be particularly looked at;
- Map these needs with the current work items of ISO/TC 307;
- Provide clarifications in terms of legislative and policy environment to CEN and CENELEC technical bodies, possibly impacted by Blockchain and Distributed Ledger Technologies;
- Identify any European standardization needs that could not be mapped to the ISO/TC 307 work items;
- Support ISO/TC 307 in enabling, whenever possible, international standards to the European context;
- Address European sustainable development, inclusiveness and societal impact; and address the needs of European citizen, including European businesses, with a focus on SMEs, European workers and consumers;
- Liaise with any relevant standardization initiatives at European and International level, as well as with fora and consortia developing Blockchain and DLT implementations;
- Provide recommendations in terms of Blockchain and DLT applicability;
- Draft guidelines on use of ISO and any other available standards in the European context;
- Maintain and update the white paper developed by the former FG.

It is foreseen to keep the members of the Focus Group engaged with communications, workshops and meetings for the development of non-formal CEN/CENELEC deliverables, such as white papers, and in specific cases where the TC decides to consult a wider stakeholder audience, for example for commenting drafts.

Purpose and justification for the proposal.

Why is standardisation needed? Explain the economic, commercial/industrial, safety, consumer protection or other benefits of the proposal. If necessary, continue on a separate sheet.

According to the "Rolling Plan on ICT Standardization 2019", Blockchain and Distributed Ledger Technologies are considered as one of the enablers in innovation for the DSM.

In the context of a DSM where the amount of online transactions and data is exploding, setting the right conditions for the advent of an open, trustworthy, transparent, compliant and authenticated transaction system is a real challenge for the EU. Existing decentralised environments lack trust, accountability, interoperability, regulatory certainty and mature governance models.

Blockchain and Distributed Ledger Technologies (BDLT) is foreseen as having potential in providing an infrastructure for trusted, decentralised and disintermediated services thanks to their potential in sharing data and managing transactions in a controlled manner. The FinTech industry was an early adopter, because of the Bitcoin use case, but BDLT may benefit and potentially transform many other industries, for example eHealth, eGovernment, education, smart contracts, trading, contracting, supply chain management, traceability along industrial supply chains, technology transfer and financing for SMEs, Internet of Things, managing intellectual property rights, eID, real estate and cadastre.

Interoperability between DLTs, between applications built on the same DLT and between DLTs and legacy systems requires standardization activities, as lack of harmonisation and interoperability, constitute obstacles to cross border and cross sector transactions. The initiatives in ISO and other international standard setting organizations need to be monitored with specific focus on European needs, coming for example from EU Regulations such as GDPR and eIDAS.

As a consequence, European participation in ISO/TC 307 will be encouraged with a mutual benefit at European and ISO level. Specific European level initiatives will be undertaken to guarantee that proper consideration is given to European needs at international level or – when appropriate – at European level.

The European Parliament resolutions on "Distributed Ledger Technologies and Blockchains building trust with disintermediation" of 3 October 2018 and "a forward-looking trade policy" of 13 December 2018 poses that the proliferation of different blockchains anchoring data for a transaction into separate private and public ledgers; recognises that there is an increasing need to develop global interoperability standards to integrate transactions across blockchains around the movement of an item along a supply chain to encourage interoperability between systems, including legacy operation systems. It also encourages the Commission to collaborate with, and contribute to the work of international organisations and feed into current projects on producing a set of standards and principles to underpin regulation aimed at facilitating the use of blockchain.

The EU Parliament resolutions and the Rolling Plan for ICT Standardization will be taken into account for specific standardization needs as well as any update or future document to insure alignment of the standardization activities with European stakeholder needs notably, for example:

- the European Blockchain Partnership with most European countries agreeing, through a joint declaration to cooperate in the establishment of a European blockchain services infrastructure that will support the delivery of cross-border public services, through interoperability and open interfaces and with the highest standards of security;
- the EU Blockchain Observatory and Forum
- the activities of INATBA - International Association of Trusted Blockchain Applications, that gives the point of view of end users.

CEN and CENELEC will identify or develop, if necessary, and recommend specific technical standards related to Blockchain and Distributed Ledger Technologies that will support, hasten and encourage the widespread adoption of digitisation, a Single Digital Market by industrial companies within the EU and development of new jobs, competencies, training and certifications, reskilling and new job classification, while protecting citizens' individual privacy concerns and providing effective security against malicious and intentional attacks. The objective is greater efficiency, productivity and competitiveness of EU industrial companies, and their full integration within the global digital market.

Is the proposed new subject actively, or probably, in support of European legislation or established public policy?

Yes No

If Yes, indicate if the proposal is

- in relation to EC mandate(s): none
- in relation to EC Directive(s)/Regulation(s): see below
- in relation to other legislation or established public policy: see below
 - Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC
 - Regulation (EU) n. 679/2016 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, repealing Directive 95/46/EC (General Data Protection Regulation, GDPR).

Proposed initial programme of work

The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall therefore show the relationship between the subjects proposed.

Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, terminology, characteristics, other requirements, data to be supplied, test methods, performance requirements, etc.). Supplementary justification may be combined with particular items in the programme of work (e.g. output from a research project).

The proposed programme of work shall also suggest priorities, target dates and the most appropriate type of deliverable (e.g. EN, TS) for each item

Nonetheless ISO/TC 307 has a general interest on the EU regulations, such as GDPR and eIDAS, it is difficult to align EU and ISO priorities as these are seen as a regional topic and its consideration within ISO standards was not prioritized at the moment.

The new TC on BDLT proposes the establishment of two specific WGs for eIDAS and GDPR areas with strong collaboration with CEN/TC 224 and joint work with CEN/CLC/JTC 13 and appropriate liaisons with existing relevant technical bodies at European and international level.

The initial activities of the TC and WGs will be to develop:

- A Technical Specification on eIDAS/eID compliance, to enable compliance with eIDAS regulation eID requirements.
- A Technical Specification on GDPR compliance, to enable compliance with GDPR requirements.

Other topics may be added to address implementation specific within the European context derived from the work of ISO/TC 307 and other bodies, such as interoperability, governance and security of blockchain.

A Technical Report on The Once Only Principle (TOOP) may be added to give support to a blockchain based infrastructure with a specific focus on cross-border digital public services to support the EU eGovernment Action Plan 2016-2020 and the work of the European Blockchain Partnership.

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing CEN, CENELEC, ISO and IEC deliverables.

The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization, or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

The primacy of international standards setting on Blockchain and Distributed Ledger Technologies, notably those developed by ISO/TC 307, is fully recognized and ISO/TC 307 will be the first target for new development proposals, however specific European standardization needs not recognized at the international level might require the development of standards at the European level. Additionally the prioritization decided at international level is also such that in some instances CEN/CENELEC need to undertake work which is more urgent in the European context than in the international one. In these cases, whenever possible, collaborative development of standards will be established according to the Vienna/Frankfurt agreements already in place between CEN/CENELEC and ISO/IEC. The agreements foresee procedures for the notification of the documents developed in one body to allow simultaneous approval in the other body.

Liaison will be established with the relevant bodies at European and international level to minimize the risk of conflict or duplication.

A listing of relevant existing documents at the international, regional and national levels.

Any known relevant documents (such as standards and regulations) shall be listed, regardless of their source, and should be accompanied by an indication of their significance.

- CEN-CENELEC White Paper 'Recommendations for Successful Adoption in Europe of Emerging Technical Standards on Distributed Ledger/Blockchain Technologies'
Available at:
<ftp://ftp.cencenelec.eu/EN/EuropeanStandardization/Sectors/ICT/Blockchain%20+%20DLT/FG-BDLT-White%20paper-Version1.2.pdf>
- the Rolling Plan on ICT Standardization 2019
Available at: https://ec.europa.eu/growth/content/2019-rolling-plan-ict-standardisation-released_en
- EU Parliament resolution of 3 October 2018 "Distributed ledger technologies and blockchains: building trust with disintermediation"
Available at:
<https://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2018-0373+0+DOC+PDF+V0//EN>
- EU Parliament resolution of 13 December 2018 "Blockchain: a forward-looking trade policy"
Available at:
<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P8-TA-2018-0528+0+DOC+PDF+V0//EN>

Known patented items

Yes No If "Yes", see CEN-CENELEC Guide 8 and provide full information in an annex

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) in particular those who are immediately affected from the proposal (see Annexes 1 and 2) and how they will each benefit from or be impacted by the proposed deliverable(s)

Blockchain and Distributed Ledger Technologies, as a transversal subject, affects a wide spectrum of the society and stakeholders, such as the Industry and commerce, Government, Consumers, Non-governmental organisations and Standards application business. The expected earlier adapters of the technology are addressing a vast set of needs of the market such as Consumer protection and welfare, Environment, Innovation, Support to Public policy and European legislation/regulation, Market access/barriers to trade, i.e. enhancing the free movement of services, goods and people, Interoperability, and Health/Safety, fostering of employment and fair jobs.

<p>Liaisons: A listing of relevant external European or international organizations or internal parties (other CEN, CENELEC, ETSI, ISO and/or IEC committees) to which a liaison should be established (in the case of ISO and IEC committees via the Vienna or Dresden Agreements).</p> <ul style="list-style-type: none"> • ETSI Industry Specification Group on Permissioned Distributed Ledgers • ITU FG on Blockchain & DLT • European Union Blockchain Observatory and Forum • European Blockchain Partnership • INATBA - International Association of Trusted Blockchain Applications 	<p>Joint/parallel work: Possible joint/parallel work with:</p> <p><input checked="" type="checkbox"/> CEN (please specify committee ID) CEN/TC 224, CEN-CLC/JTC 13</p> <p><input type="checkbox"/> CENELEC (please specify committee ID) CEN-CLC/JTC 13</p> <p><input checked="" type="checkbox"/> ISO (please specify committee ID) ISO TC 307</p> <p><input type="checkbox"/> IEC (please specify committee ID)</p> <p><input type="checkbox"/> Other (please specify)</p>
<p>Name of the Proposer <i>(include contact details)</i></p> <p>Gian Luca Salerio – Italian BT Member e-mail: gianluca.salerio@uni.com</p> <p>UNI – Ente Italiano di Normazione – Via Sannio 2 – 20137 Milano</p> <p>An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.</p> <p>UNI is willing to run the Secretariat in case the TC is established</p> <div style="text-align: right;">  </div> <p style="text-align: center;">Signature of the proposer</p>	

Annex(es) are included with this proposal (give details)

Informative Annex 1 "Principal categories of market needs"

- Consumer protection and welfare
- Environment
- Innovation
- Support to:
 - public policy
 - European legislation/regulation
- Market access/barriers to trade, i.e. enhancing the free movement of:
 - services
 - goods
 - people
- Interoperability
- Health/Safety
- Terminology

Informative Annex 2 "Principal categories of stakeholders"

- Industry and commerce,
 - where particularly appropriate, to be identified separately as
 - Large enterprises (those employing 250 staff or more)
 - Small and medium sized enterprises (SME), (those employing 250 staff or fewer)
- Government
- Consumers
 - including those organizations representing interests of specific societal groups, e.g. people with disabilities or those needing other particular consideration)
- Labour
- Academic and research bodies
- Non-governmental organisations (NGO),
 - including organizations representing broad or specific environmental interests
- Standards application business (e.g. testing laboratories, certification bodies)

Sometimes it is valuable also identify the immediate affected stakeholders from industry and commerce in terms of their position in a product value chain, as follows:

- Supplier
- Manufacturer
- Intermediary (e.g. warehousing, transport, sales)
- Service provider
- User of the product or service
- Maintenance / disposal

NOTE: 'Immediately affected stakeholders' are considered to be those who, within the context of the proposal, would be in a position to implement the provisions of the intended standard(s) into their products, services or management practices.